



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,189	04/22/2004	Yoshikazu Hayashi	2004_0608A	6055
52349 7590 02/17/2009 WENDEROTH, LIND & PONACK L.L.P. 2033 K. STREET, NW SUITE 800 WASHINGTON, DC 20006			EXAMINER IDOWU, OLUGBENGA O	
			ART UNIT 2425	PAPER NUMBER
			MAIL DATE 02/17/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/829,189	Applicant(s) HAYASHI, YOSHIKAZU	
	Examiner OLUGBENGA O. IDOWU	Art Unit 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 14 - 20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14 - 20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 7 and 14 - 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu, publication number: 2002/0157115 in view of Tsurumi, patent number US 6 714 262 in view of Sadanaka, patent number 6 751 197 in view of Lecron, publication number US 2005 0144646 in view of Prus, publication number 2005/0144651 in further view of Candelore, publication number: US 2004/0086127 A1.

As per claims 1 and 14, Lu teaches a receiver for use with a removable security device~ wherein the security device stores security information on a broadcasting entity and extracts SI (Service Information) information for receiving a broadcasting signal modulated in a predetermined modulation mode from a control signal transmitted from an apparatus of the broadcasting entity, the security" device being removably mounted in said receiver, wherein said receiver receives the broadcasting signal transmitted from the apparatus of the broadcasting entity based on extracted transmission information (POD module, [0026 – 0027]), said receiver comprising:

a first tuner for controlling a frequency of the received broadcasting signal to select a channel of a predetermined broadcasting signal (Tuner, [0038]);

a first demodulator capable of demodulating the broadcasting signal transmitted from the apparatus of the broadcasting entity in a plurality of demodulation modes corresponding to modulation modes of modulation systems of the broadcasting signal, said first demodulator demodulating the broadcasting signal of the channel selected by said first tuner in a demodulation mode which is set among the plurality of demodulation modes (demodulation, [0026][0033]);

a first controller for controlling the demodulation mode of said first demodulator (Fig 3, 210);

when it is detected by said device detector that the security device is not mounted in said receiver, (1) controlling said first tuner, said first demodulator, and said first controller, so as to, and to retrieve a broadcasting channel on which the transmission

Art Unit: 2425

information on the broadcasting signal is transmitted, (2) receiving the broadcasting signal on said retrieved broadcasting channel, extracting the transmission information on the broadcasting channel from the broadcasting signal demodulated by said first demodulator, and (4) receiving the broadcasting signal based on the extracted transmission information on the broadcasting signal (STB operation, [0006],[0026] and [0029]).

However, Lu fails to specifically disclose a synchronization judgment unit for judging whether or not said demodulator is synchronized with the received broadcasting signal, and for outputting a synchronization judgment result signal.

Tsurumi discloses a synchronization judgment unit for judging whether or not said demodulator is synchronized with the received broadcasting signal, and for outputting a synchronization judgment result signal (see column 6, lines 35-43).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lu's invention with the above mentioned limitation as taught by Tsurumi for the advantage of presetting all receivable channels in a short time. However, Lu and Tsurumi fail to specifically disclose a second controller and changing at least one of the demodulation mode for said broadcasting signal and the frequency of said broadcasting signal

Art Unit: 2425

Sadanaka discloses a second controller (controller (12)) and changing at least one of the demodulation mode for said broadcasting signal and the frequency of said broadcasting signal (see column 4, lines 29-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lu and Tsurumi's invention with the above mentioned limitation as taught by Sadanaka for the advantage of having a more flexible system with the options of multiple modes of operation

The combination of Lu, Tsurumi and Sadanaka does not teach the presence of a second tuner and demodulator.

In an analogous art, Lecron teaches a second tuner for controlling a frequency of the received broadcasting signal to select a channel of a predetermined control signal; a second demodulator for demodulating the control signal of the channel selected by said second tuner and outputting FDC (Forward Data Channel) data (second tuner and demodulator, [0139]);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Lu, Tsurumi and Sadanaka by including a system with multiple tuners and demodulators for the advantage of receiving and demodulating multiple streams at the same time.

The combination of Lu, Tsurumi, Sadanaka and Lecron do not teach a device detector for detecting whether or not the security device is mounted in said receiver and steps to be performed if device is mounted.

Art Unit: 2425

In an analogous art, Prus teaches a device detector for detecting whether or not the security device is mounted in said receiver and steps to be performed if device is mounted (checking for presence of a smart card, [0032 – 0034])

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Lu, Tsurumi, Sadanaka and Lecron by including a system that checks for the presence of a smart card and steps to be taken based on result as described in Prus for the advantage of knowing the steps to take for the system to stay operable.

The combination does not teach extracting transmission information from the SI information extracted by said security device, receiving the broadcasting signal based on the extracted transmission information and storing the extracted transmission information in data memory.

In an analogous art, Candelore teaches extracting transmission information from the SI information extracted by said security device (descrambling SI, [0060][0037]), receiving the broadcasting signal based on the extracted transmission information (receiving content based on EMM and ECM comparisons, [0042]) and storing the extracted transmission information in data memory (storing decryption information, [0055]), system with two modes of operation ([0064][0068]).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination by including a system that allows to receive only authorized data and

Art Unit: 2425

store information corresponding to received data for the advantages of reducing the strain placed on the system to constantly acquire program authorization and reducing the strain on bandwidth by just receiving required data only.

As per claims 2 and 15, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein said second controller initializes a demodulation mode control processing executed by said first controller immediately after the frequency of said fast tuner is changed (Lu: [0051]).

As per claims 3 and 16, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein said first controller controls at least one of a modulation rate, filter coefficients (Lu: [0024]), and a constellation which are set to said first demodulator based on the synchronization judgment result signal from said synchronization judgment unit until said first demodulator is synchronized with the received broadcasting signal (Tsurumi: col. 6, lines 35 - 43).

As per claims 4 and 17, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein said first demodulator comprises a carrier recovery circuit which reproduces a carrier wave of the received broadcasting signal (Tsurumi: Fig. 2, 24, col. 5, lines 21 – 65, col. 6), and

Art Unit: 2425

wherein said synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on a phase error of a demodulated signal reproduced by said carrier recovery circuit (Tsurumi: Col. 5, lines 52 - 65, col. 6, lines 1 - 42).

As per claims 5 and 18, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein said first demodulator comprises a clock recovery circuit which reproduces a clock signal of the received broadcasting signal (Tsurumi: Fig. 2, 23, col. 5, lines 21 - 65, col. 6), and

wherein said synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on a phase error of the clock signal reproduced by said clock signal recovery circuit (Tsurumi: Col. 5, lines 52 - 65, col. 6, lines 1 - 42).

As per claims 6 and 19, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein said first demodulator comprises an error correction circuit which corrects an error of the received broadcasting signal (Tsurumi: Fig. 3, 26, col. 5, lines 21 - 65, col. 6), and

wherein said synchronization judgment unit judges whether or not said first demodulator is synchronized with the received broadcasting signal based on whether or not a frame synchronous signal outputted from said error correction circuit can be detected (Tsurumi: col. 6, lines 9 - 65, col. 9, lines 30 - 35).

As per claims 7 and 20, the combination of Lu, Tsurumi, Sadanaka, Lecron, Prus and Candelore teach wherein each of said first controller unit is constituted by a hardware circuit (Lu: [0017], lines 13 – 19)

Tsurumi discloses said synchronization judgement unit is constituted by a hardware circuit (col. 6, lines 35 - 43 and Fig 3, 2 and 29)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUGBENGA O. IDOWU whose telephone number is (571)270-1450. The examiner can normally be reached on Monday to Friday, 7am - 5pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendelton can be reached on 571 272 7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2425

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Olugbenga O Idowu/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425